

TRANSMITTAL OF APPEAL BRIEF (Large Entity)

Docket No.
1112-0051

In Re Application Of: Robert E. Callies

Application No. 09/872,604	Filing Date 06/01/2001	Examiner Davis D. Hwu	Customer No. 26568	Group Art Unit 3752	Confirmation No. 2262
-------------------------------	---------------------------	--------------------------	-----------------------	------------------------	--------------------------

Invention: DISTRIBUTION TUBE ASSEMBLY FOR IRRIGATION



COMMISSIONER FOR PATENTS:

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on 04/18/2005

The fee for filing this Appeal Brief is: \$500.00

- ☐ A check in the amount of the fee is enclosed.
- ☐ The Director has already been authorized to charge fees in this application to a Deposit Account.
- ☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 50-1039
- ☐ Payment by credit card. Form PTO-2038 is attached.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

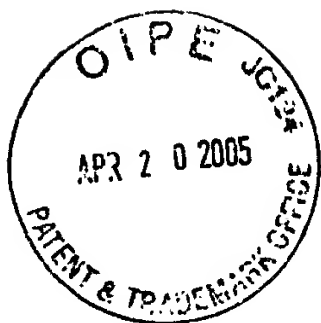
Joel H. Bock
Signature

Dated: April 18, 2005

Joel H. Bock, Registration No. 29,045
COOK, ALEX, MC FARRON, MANZO, CUMMINGS
& MEHLER, LTD.
200 W. Adams Street - Suite 2850
Chicago, IL 60606
(312) 236-8500

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on	
04/18/2005	(Date)
<i>Diane G. Kapil</i>	
Signature of Person Mailing Correspondence	
Diane G. Kapil	
Typed or Printed Name of Person Mailing Correspondence	

cc:

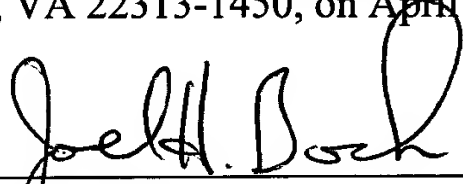


PATENT
Attorney Docket No. 1112-0051

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:)
Robert E. Callies et al.)
Serial No.: 09/872,604)
Filed: June 1, 2001)
Group Art Unit: 3752)
Examiner: Davis D. Hwu)
For: DISTRIBUTION TUBE ASSEMBLY)
FOR IRRIGATION)
)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 18, 2005.



Joel H. Bock
Registration No. 29,045

Mail Stop Appeal Brief-Patents
Commissioner for Patents
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

(1) REAL PARTY IN INTEREST

The real party in interest in this appeal is Lindsay Manufacturing Company, assignee of the invention, which assignment was recorded in the United States Patent and Trademark Office on June 1, 2001, at Reel No. 011875 and Frame No. 0001.

(2) RELATED APPEALS AND INTERFERENCES

None.

(3) STATUS OF CLAIMS

This application includes claims 1-29 of which claims 1, 16, 26 and 29 are independent. Claims 26-29 are withdrawn as directed to a non-elected invention. Dependent claims 10-12 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 1-9, 13-19 and 21-25 are rejected. Applicants appeal the rejection of claims 1-9, 13-19 and 21-25.

(4) STATUS OF AMENDMENTS

No amendments were filed after final rejection.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

The invention of both claims 1 and 16 are directed to a distribution tube assembly for an irrigation system of the type having a main supply line for conveying fluid (page 6, lines 1-16 or paragraph 28). The current application includes several different examples of distribution tube assemblies at 10 in Figs. 2-4, 76 in Fig. 5, 84 in Fig. 6 or 124 in Figs. 12-15. These examples are generally discussed at page 6, line 17 to page 8, line 18 (paragraphs 29-32) for Figures 2-4, at page 10, lines 11-17 (paragraph 37) for Figures 5 and 10, at page 10, lines 17-20 (paragraph 38) for Figures 6 and 9, and at page 12, lines 3-14 (paragraph 40) for Figures 12-15.

In claim 1, the distribution tube assembly comprises an elongated frame with a first upstream end, a second downstream end and at least two fluid passageways defined therein to

permit more than one fluid stream therethrough. In Figures 2-6, the frame 20 has two fluid passageways 28 and 32 defined between the upstream and downstream ends of the frame 20. In Figures 12-13, the frame 126 has three passageways 130, 134 and 138. As set forth in claim 1, each passageway permits fluid flow from the first upstream end to the second downstream end such as, for example, in Figure 4, in which fluid is permitted to enter the first upstream end 22 and fluid flows from the first upstream end 22 to the second downstream end 24.

Claim 1 further includes that at least one of the fluid passageways is in fluid communication with the main supply line and at least another of the fluid passageways is in fluid communication with a second fluid supply line. In Figures 2-6, one of the first and second fluid passageways 28 and 32 is disclosed as being in fluid communication with the main supply line 12 which may be connected to a water source (page 7, lines 11-13 or paragraph 30). The other of the two passageways 28 and 32 is disclosed as being in fluid communication with a second supply line which may be connected to a reservoir containing a chemical, additive, pilot pressure fluid or the like (page 7, lines 13-18 or paragraph 30). Similarly, in Figures 12-13, at least one of the first, second and third passageways 130, 134 and 138 are disclosed as being fluidly joined to the main supply line, and at least one of the other of the first, second and third passageways 130, 134 and 138 are disclosed as being fluidly joined to an alternate supply line or a third fluid supply (page 12, last line to page 13, first line).

In claim 16, the distribution tube assembly also comprises a distribution tube frame having at least two fluid passageways defined therein, similar to claim 1 as described above. In addition, claim 16 recites that each fluid passageway extends substantially throughout the frame

20 between an upstream end (e.g., at 22 in Figure 4) and a downstream end (e.g., at 24 in Figure 4) to direct fluid flow from the upstream end to the downstream end. Claim 16 further shares another similar feature with claim 1 in that at least one of the fluid passageways is in fluid communication with the main supply line and at least another of the fluid passageways is in fluid communication with a second fluid supply line, as described above.

(6) GROUND OF REJECTION TO BE REVIEWED ON APPEAL

(A) Claims 1, 3-9, 14, 16-19 and 23-25 are rejected under 35 U.S.C. §102(b) as anticipated by Hane 4,162,041 (hereinafter “Hane ‘041”). Applicant separately presents arguments as to: (I) whether independent claim 1 and dependent claims 3-9 and 14 are anticipated by Hane ‘041; and (II) whether independent claim 16 and dependent claims 17-19 and 23-25 are anticipated by Hane ‘041.

(B) Claims 1, 2, 13, 14, 16-19, 21 and 23-25 are rejected under 35 U.S.C. §102(b) as anticipated by Dunn 4,763,842 (hereinafter “Dunn ‘842”). Applicant separately presents arguments as to: (I) whether independent claim 1 and dependent claims 2, 13 and 14 are anticipated by Dunn ‘842; and (II) whether independent claim 16 and dependent claims 17-19, 21, and 23-25 are anticipated by Dunn ‘842.

(C) Claims 15 and 22 are rejected under 35 U.S.C. §103 as obvious in view of Hane ‘041.

(7) ARGUMENT

(A) Regarding whether claims 1, 3-9, 14, 16-19 and 23-25 are unpatentable under 35 U.S.C. §102(b) as anticipated by Hane (4,162,041) (hereinafter “Hane ‘041”):

(I) Independent claim 1 and dependent claims 3-9 and 14 are not anticipated by Hane ‘041.

In the Final Office Action, Hane was applied to reject claim 1 on the basis of anticipation. Claim 1 is recited in the Appendix. In particular, Hane '041 was relied upon at page 2 of the action as disclosing:

Hane shows...at least two fluid passageways 2 and 3 defined therein to permit more than one fluid stream therethrough, each passageway permitting fluid flow from the first upstream end to the second downstream end, at least one of the fluid passageways being in fluid communication with the main supply line, at least another of the fluid passageways being in fluid communication with a second fluid supply line 18.

Applicants respectfully disagree. Hane '041 teaches a fundamentally different structure which does anticipate the claimed structure for three reasons: (1) Hane '041 does not teach at least two fluid passageways defined therein to permit more than one fluid stream therethrough, as recited in claim 1; (2) Hane '041 does not teach that at least one of the fluid passageways is in fluid communication with the main supply line and at least another of the fluid passageways is in fluid communication with a second fluid supply line; and (3) Hane '041 does not teach that each passageway permits fluid flow from the first upstream end to the second downstream end. Each of these reasons will be discussed further below.

As to reason (1), the water sprinkling device 1 disclosed in Hane '041 consists of a plurality of main pipes 2 and sub-pipes 3 connected by first sockets 4 and second sockets 5. It is important to note that Hane's first sockets 4, as shown in Fig. 3, do not permit water flow from one sub-pipe segment 3 to the next such segment. Closure part 12 prevents such flow. Only the second sockets 5 (as shown in Fig. 5) optionally permits flow between adjacent sub-pipes 3.

Applicants emphasize that the water sprinkling device 1 of Hane '041 does not define more than one fluid passageway throughout its length. Hane's sub-pipes 3 do not permit fluid flow from the upstream end of the water sprinkling device 1 to the downstream end of the device.

For example in Fig. 1, water does not flow from the leftward-most first socket 4 of the sub-pipes 3. As clearly shown in Fig. 3 , the first socket 4 has a closure part 12 “to shut off the passage of liquid flow” (column 6, lines 44-45). Fig. 1 shows other first sockets 4 positioned along the device 1 which similarly have a closure part 12 which shuts off liquid flow. Therefore, the sockets 4 in Hane ‘041 completely close off the series of sub-pipes 3 to any fluid flow from the upstream end to the downstream end of the device 1.

It must further be emphasized that Hane clearly teaches that the sub-pipes 3 are subdivisions of the same passageway defined by the main pipes 2. The sub-pipes 3 are merely an extension or branch of the same fluid stream defined by the main pipe 2. Water can only feed into the sub-pipes 3 from the main pipe 2 at an intermediate location through the second socket 5. From such intermediate location, the water then branches either left or right, relative to Fig. 5, into the sub-pipes 3 and consequently flows out of the numerous spurting holes defined in the sub-pipes 3 (col. 7, lines 46-48).

In view of the above, the main pipes 2 and sub-pipes 3 in Hane ‘041 do not define structures which comprises at least two fluid passageways for permitting fluid flow from the first upstream end to the second downstream end in each passageway. Rather than teaching a second passageway, the sub-pipes 3 teach branched extensions at intermediate locations along the length of the same fluid passageway which is defined by the main pipes 2. Therefore, this is one reason that Hane ‘041 cannot anticipate the claimed structure.

In addition, claim 1 is not anticipated by Hane ‘041 because of reason (2) above. Hane ‘041 does not teach a second fluid supply, separate from the first or main supply line, which is in fluid communication with at least one of the fluid passageways. Hane ‘041 teaches that the main

pipe 2 is in fluid communication with a master pipe 7 and sub-pipes 3 are in fluid communication with main pipes 2. There is no second fluid supply whatsoever, separate from the master pipe 7, which is in fluid communication with one of the main pipe 2 or sub-pipe 3. There is no way to supply a second fluid, separate from the fluid that comes from master pipe 7, to the sub-pipes 3.

It is stated in the Final Office Action that Hane '041 teaches a second fluid supply line 18 “[S]ince it supplies fluid from passageway 2 to passageway 3. Hole 18 is thus considered to be a second fluid supply line.” However, the part indicated by reference number 18 in Hane '041 is not a second fluid supply line, it is a hole 18 which is formed on the inside of the second socket 5 (See Figures 5 and 6; col. 6, lines 61-67). The hole 18 merely permits fluid flow from the main pipe 2 to the branches or sub-pipes 3. In Fig. 5, fluid from the main pipe 2 enters the hole 18 and optionally is permitted to flow left or right into the sub-pipes 3, provided the knob 17 is turned such that two pairs of holes 15, 15 and 19, 19 are aligned to permit such flow. Since the hole 18 defines an opening which is supplied by the same fluid supply line as the main pipe 2, it is clear that the hole 18 cannot suddenly define a “second fluid supply line”.

Hane '041 teaches that the hole 18 is always in fluid communication with the same fluid supply line (i.e., the master pipe 7) as the main pipe 2. Hane does not teach that the hole 18 communicates with any other fluid supply line. Any other interpretation disregards the clear teaching provided in Hane '041 that all main pipes 2 and sub-pipes 3 in the entire water sprinkling device 1 are fed by a single fluid supply line.

Further, any other interpretation is also contrary to the meaning of the claimed term “second fluid supply line” which defines a separate fluid supply line than the first or main fluid supply line.

As to reason (3) claim 1 calls for each passageway to permit fluid flow from the first upstream end to the second downstream end. Hane's structure does not do this. Nothing can flow to or from the ends of Hane's sub-pipes 3 because they are closed off by closure part 12. All flow in sub-pipes 3 is intermediate the ends of those pipes. Clearly, this has no relation to the claimed structure.

For all the above reasons, Hane '041 is respectfully believed to lack the essential features of independent claim 1 such that it cannot anticipate this claim. Withdrawal of the rejection of claim 1 and dependent claims 3-9 and 14 is respectfully requested. Based on the above, an allowance of claim 1 and dependent claims 2-15 is respectfully requested.

(II) Independent claim 16 and dependent claims 17-19 and 23-25 are not anticipated by Hane '041.

In the Final Office Action, claim 16 was rejected on the same basis as claim 1 which was based on anticipation by Hane '041. To the extent this rejection is supported by the same grounds in the Final Office Action, applicants respectfully reiterate the arguments discussed with claim 1 above. Further, applicants separately argue the rejection of claim 16 based on the claimed features which are not taught in Hane '041.

Specifically, claim 16 recites that the fluid passageways each extend substantially throughout the frame between an upstream end and a downstream end to direct fluid flow from the upstream end to the downstream end. Applicants reiterate from the above arguments that the water sprinkling device 1 of Hane '041 does not define at least two fluid passageways that extend substantially throughout the frame. The series of sub-pipes 3 in Hane '041 are blocked off by several closure parts 12 formed in the connection sockets 4. This is due to Hane's teaching that

the sub-pipes 3 are branched extensions from the main pipe 2 and that they do not define a second passageway.

In addition, claim 16 also requires a second fluid supply line which is separate from the main supply line and which communicates with at least one of the fluid passageways. This feature is the same as discussed in claim 1 above. Thus, applicants reemphasize the above arguments relative to claim 1, as these reasons are also applicable to claim 16.

Therefore, it is respectfully submitted that claim 16 is not anticipated by Hane '041. Applicants respectfully request withdrawal of this rejection and allowance of claim 16 and claims 17-25 which depend either directly or indirectly from claim 16.

(B) Regarding whether claims 1, 2, 13, 14, 16-19, 21 and 23-25 are unpatentable under 35 U.S.C. §102(b) as anticipated (4,763,842) (hereinafter "Dunn '842"):

(I) Independent claim 1 and dependent claims 2, 13 and 14 are not anticipated by Dunn '842.

Applicants now turn to the §102 rejection of independent claim 1 over Dunn '842. In the Final Office Action, Dunn '842 was relied upon to reject independent claim 1 as follows:

Dunn shows a distribution tube assembly...comprising an elongated frame with a first upstream end, a second downstream end and at least two fluid passageways 22 and 30 defined therein to permit more than one fluid stream therethrough, each passageway permitting fluid flow from the first upstream end to the second downstream end, at least one of the fluid passageways being in fluid communication with the main supply line, at least another of the fluid passageways being in fluid communication with a second fluid supply line 26.

Applicants respectfully disagree with this interpretation for reasons similar to those discussed above with respect to Hane '041. Specifically, the supply channel 22 and the pressure channel 30 of Dunn '842 do not define first and second passageways where each passageway

permits a fluid stream to flow from an upstream end of the water drip device 10 to the downstream end of the water drip device. In addition, Dunn '842 does not teach a second fluid supply line which is separate from the main supply line and in fluid communication with at least one of the fluid passageways. As discussed below, Dunn '842 discloses a structure which suffers from the same deficiencies as Hane '041.

In Dunn '842, a water drip device 10 comprises a supply channel 22 constructed of plastic tape 11 having sides 18 and 20 which are joined together and sealed. The tape 11 includes segmented pressure channels 30 positioned above the supply channel 22. The section of the watering device 10 shown in Figure 1 shows one complete pressure channel 30 and part of another pressure channel 30. As shown in Figure 1, the pressure channel 30 is separated from an adjacent pressure channel 30 by sealed portions of the tape 11. Adjacent pressure channels 30 are further separated from each other by an invented V-shaped stabilizer cavity 38 which is necessary to prevent collapse or restriction of water flow through the pressure channels 30 (col. 3, lines 60-66). In Figure 1 of Dunn '842, water from the supply channel 22 flows through the opening 26 to the pressure channel 30 and then is directed left (see Figure 1) to exit a respective water outlet 36.

Contrary to the assertion in the Final Office Action, the structure in Dunn '842 fails to define a second fluid passageway to permit more than one fluid stream therethrough. The pressure channels 30 are separate and fluidly separated from one another such that no fluid stream is permitted through the series of pressure channels. Each pressure channel 30 can only be supplied with water from the supply channel 22 through an individual opening 26 which is separately associated with each pressure channel 30. The pressure channels 30 are no more than

branches from the same supply channel 22. Therefore, it must be emphasized that Dunn's pressure channels 30 are merely sub-divisions or branches from the same supply channel 22 so that Dunn '842 does not teach anything further than Hane '041.

Based on the above, Dunn '842 teaches a single fluid pathway with branched extensions which is defined by both channels 22 and 30. Clearly, no one pressure channel 30 discloses a second passageway which permits fluid flow from the upstream end to the downstream end of the watering device 10. Rather, each pressure channel 30 is fluidly separated from the other pressure channels 30 along the length of the device 10. Dunn's supply channel 22 and pressure channel 30 thus do not define first and second passageways where each passageway permits a fluid stream to flow from an upstream end of the water drip device 10 to the downstream end of the water drip device, in contrast to claim 1.

In addition, Dunn '842 also fails to teach the claimed invention for another reason. Dunn '842 teaches that both the supply channel 22 and the pressure channel 30 are connected to a single pressurized water source (Col. 5, lines 6-7). No other fluid supply is mentioned in Dunn '842.

Contrary to the assertion in the Final Office Action, the opening 26 does not constitute a second fluid supply line. Rather, the opening 26 is associated with each respective pressure channel 30 to supply water to each individual pressure channel from the same supply channel 22. Water can only enter the opening 26 to the pressure channel 30 after the water has passed through the supply channel 22 and all water in the supply channel 22 is supplied by the same pressurized water source. There is no teaching in Dunn '842 of any second fluid supply line. Therefore,

Dunn '842 lacks essential features of claim 1, similar to the above discussion with respect to Hane '041.

For this additional reason, the withdrawal of the rejection as to claim 1 and dependent claims 2, 13 and 14 is respectfully requested together with an allowance of these claims.

(II) Independent claim 16 and dependent claims 17-19, 21, and 23-25 are not anticipated by Dunn '842.

In the Final Office Action, claim 16 was rejected on the same basis as claim 1 which was based on anticipation by Dunn '842. To the extent this rejection is supported by the same grounds in the Final Office Action, applicants respectfully reiterate the arguments discussed with claim 1 above. In addition, applicants separately emphasize the features of claim 16 which are not taught by Dunn '842.

In contrast to claim 16, Dunn '842 does not teach two fluid passageways defined therein and extending substantially throughout the frame between an upstream end and a downstream end to direct fluid flow from the upstream end to the downstream end. As discussed above, the Final Office Action improperly interprets the pressure channel 30 as a second passageway. In fact, the pressure channel 30 does not define the claimed second passageway, and, instead, the pressure channel 30 is merely a branched extension of the supply channel 22. Thus, the pressure channel 30 is merely an extension of the same passageway which is defined by the supply channel 22 rather than any second passageway.

In further contrast to claim 16, Dunn '842 does not teach a second fluid supply line, which in the Final Office Action is compared to the opening 26. Only one pressurized fluid source is ever taught in Dunn '842 for supplying water to all the supply channel 22 and the

pressure channels 30. Any other interpretation improperly attributes to Dunn '842 teachings that simply are not present anywhere in Dunn '842.

For all the above reasons, applicants respectfully request that the rejection of claims 16-19, 21, and 23-25 be withdrawn and that these claims be allowed.

(C) Regarding whether claims 15 and 22 are unpatentable under 35 U.S.C. §103(a) as obvious in view of Hane '041:

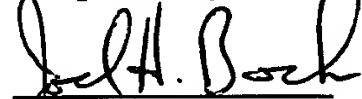
Applicant respectfully submits that claims 15 and 22 are allowable for the additional reason that they call for adaptors having a cavity which receives a regulator valve therein. Hane's valve 8 is cited in the Final Office Action as showing a regulator valve. There is no disclosure in Hane that valve 8 is a regulator valve. At Col. 6, line 22 Hane simply says the supply of liquid is stopped by a valve 8 that is provided in the master pipe. This suggests a simple on-off device. In this art it is well understood that a regulator valve regulates or limits the pressure downstream of the valve. Ordinarily it doesn't shut the flow off entirely. Further, the placement of a regulator valve would not ordinarily be placed in the location where valve 8 is shown in Hane, due to the potential pressure losses downstream of that location. Regulator valves are located at or near the final distribution point of the water. Nothing in Hane suggests the structure recited in claims 15 and 22.

Conclusion

For these reasons, independent claims 1 and 16 and all their corresponding dependent claims 2-9, 13-15, 17-19 and 21-25 are respectfully believed to be distinguishable over the cited references in addition to dependent claims 10-12 and 20 which are already indicated as allowable.

A check in the amount of \$500 is enclosed to cover the fee for the filing of this appeal brief. Authorization for any deficiency of fees is hereby given to charge deposit account no. 50-1039. (A duplicate copy of this document is enclosed.)

Respectfully submitted,



Joel H. Bock

Attorney of Record

Registration No.: 29,045

COOK, ALEX, McFARRON, MANZO,
CUMMINGS & MEHLER, LTD.
200 West Adams Street, Suite 2850
Chicago, Illinois 60606
(312)236-8500

(8) CLAIM APPENDIX

1. (Currently amended) A distribution tube assembly for an irrigation system of the type having a main supply line for conveying fluid, the distribution tube assembly comprising an elongated frame with a first upstream end, a second downstream end and at least two fluid passageways defined therein to permit more than one fluid stream therethrough, each passageway permitting fluid flow from the first upstream end to the second downstream end, at least one of the fluid passageways being in fluid communication with the main supply line, at least another of the fluid passageways being in fluid communication with a second fluid supply line.

2. (Original) The distribution tube assembly of claim 1 wherein a first fluid passageway is at least twice as large as a second fluid passageway.

3. (Original) The distribution tube assembly of claim 1 wherein a first fluid passageway is in fluid communication with the main supply line and a second fluid passageway is in fluid communication with an alternate supply line.

4. (Original) The distribution tube assembly of claim 1 further comprising an adaptor.

5. (Original) The distribution tube assembly of claim 4 wherein the adaptor is positioned at the first end of the distribution tube assembly.

6. (Original) The distribution tube assembly of claim 4 wherein the adaptor is positioned at the second end of the distribution tube assembly.

7. (Original) The distribution tube assembly of claim 4 wherein the adaptor comprises a branch fitting in fluid communication with at least one of the fluid passageways.

8. (Original) The distribution tube assembly of claim 4 wherein said adaptor has a plurality of bores disposed therein which are in fluid communication with at least one of the fluid passageways.

9. (Original) The distribution tube assembly of claim 4 wherein the adaptor has at least one annular coupler located thereon.

10. (Currently amended) The distribution tube assembly of claim 9 wherein the annular coupler engages a selected one of the internal surface of one of the passageways and the external surface of one of the passageways.

11. (Original) The distribution tube assembly of claim 10 wherein the annular coupler has external threads for engaging the internal surface of one of the passageways.

12. (Original) The distribution tube assembly of claim 10 wherein the annular coupler has external ribs for engaging the internal surface of one of the passageways.

13. (Original) The distribution tube assembly of claim 1 wherein the fluid passageways have different diameters to accommodate different flow rates.

14. (Original) The distribution tube assembly of claim 1 further characterized in that there are first, second and third passageways defined in the distribution tube frame.

15. (Original) The distribution tube assembly of claim 4 wherein the adaptor has a cavity which receives a regulator valve therein.

16. (Currently Amended) A distribution tube assembly for an irrigation system of the type having a main supply line for conveying fluid, the distribution tube assembly comprising a distribution tube frame having at least two fluid passageways defined therein and extending substantially throughout the frame between an upstream end and a downstream end to direct fluid

flow from the upstream end to the downstream end, at least one of the fluid passageways being in fluid communication with the main supply line, at least another of the fluid passageways being in fluid communication with a second fluid supply line.

17. (Original) The distribution tube assembly of claim 16 wherein the distribution tube frame has first and second ends and further comprising at least one adaptor attached to the distribution tube frame at one of said first and second ends.

18. (Original) The distribution tube assembly of claim 16 wherein the distribution tube frame has first and second ends and further comprising a branch fitting attached to the distribution tube frame intermediate the first and second ends.

19. (Original) The distribution tube assembly of claim 17 wherein said adaptor has at least two bores disposed therein, each bore being in fluid communication with one of the distribution tube fluid passageways.

20. (Currently amended) The distribution tube assembly of claim 17 wherein the adaptor has at least one annular projection located thereon, the annular projection engaging a selected one of the internal surface of one of the passageways and the external surface of one of the passageways.

21. (Original) The distribution tube assembly of claim 16 wherein the diameter of one fluid passageway differs from that of the other fluid passageway.

22. (Previously presented) The distribution tube assembly of claim 17 wherein the adaptor defines a cavity which receives a regulator valve therein.

23. (Original) The distribution tube assembly of claim 16 wherein the distribution tube assembly has an outlet which provides for a combined fluid stream.

24. (Original) The distribution tube assembly of claim 16 wherein the distribution tube frame comprises first and second conduits joined by a web, each conduit defining a passageway therethrough.

25. (Original) The distribution tube assembly of claim 16 wherein the distribution tube frame comprises first, second and third conduits joined by first and second webs, each conduit defining a passageway therethrough.

26. (Withdrawn) A distribution tube assembly for an irrigation system of the type having a main supply line for conveying fluid, the distribution tube assembly comprising a distribution tube frame having a first conduit which defines a first passageway and a second conduit which defines a second passageway, the first and second passageways being fluidly separate from each other throughout the frame, the conduits being joined by a web, at least one of the first and second passageways being in fluid communication with the main supply line.

27. (Withdrawn) The distribution tube assembly of claim 26 further comprising an adaptor.

28. (Withdrawn) The distribution tube assembly of claim 27 wherein the adaptor comprises a branch fitting in fluid communication with at least one of the first and second passageways.

29. (Withdrawn) A distribution tube assembly for an irrigation system of the type having a main supply line for conveying fluid, the distribution tube assembly comprising a distribution tube frame having a first conduit which defines an irrigation fluid passageway and a second conduit which defines a pilot pressure fluid passageway, the irrigation fluid

passageway being in fluid communication with the main supply line, the pilot pressure fluid
passageway being in fluid communication with a pilot pressure fluid.

(9) EVIDENCE APPENDIX

None.

(10) RELATED PROCEEDINGS APPENDIX

None.